

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO. | F | ILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---------------------------|------------|-----------------------|----------------------|---------------------|------------------|
| 10/523,762 | 02/07/2005 | | Naoki Hashiguchi | 025260-093 | 2619 |
| 21839 | 7590 | 09/20/2006 | | EXAMINER | |
| BUCHANA POST OFFICE | | ERSOLL & ROON 1404 | KRUER, STEFAN | | |
| ALEXANDRIA, VA 22313-1404 | | | | ART UNIT | PAPER NUMBER |
| | | | | 3654 | |

DATE MAILED: 09/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | Applicant(s) | | | | |
|--|--|-------------------------|--|--|--|--|
| | 10/523,762 | HASHIGUCHI, NAOKI | | | | |
| Office Action Summary | Examiner | Art Unit | | | | |
| | Stefan Kruer | 3654 | | | | |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address | | | | | | |
| Period for Reply | | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). | | | | | | |
| Status | | | | | | |
| 1) Responsive to communication(s) filed on | <u>_</u> . | | | | | |
| , | This action is FINAL . 2b)⊠ This action is non-final. | | | | | |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | | | |
| closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. | | | | | | |
| Disposition of Claims | | | | | | |
| 4) Claim(s) 14 - 25 is/are pending in the application. | | | | | | |
| 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | |
| 5) Claim(s) is/are allowed. | | | | | | |
| 6)⊠ Claim(s) <u>14 - 25</u> is/are rejected. | | | | | | |
| 7) Claim(s) is/are objected to. | r alastian requirement | | | | | |
| 8) Claim(s) are subject to restriction and/o | r election requirement. | | | | | |
| Application Papers | | | | | | |
| 9) The specification is objected to by the Examine | г. | | | | | |
| 10) \boxtimes The drawing(s) filed on <u>07 February 2005</u> is/are: a) \boxtimes accepted or b) \square objected to by the Examiner. | | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | |
| 11) I he oath or declaration is objected to by the Ex | aminer. Note the attached Office | Action of form PTO-152. | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | |
| 12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a)⊠ All b)□ Some * c)□ None of: | | | | | | |
| 1. Certified copies of the priority documents have been received. | | | | | | |
| 2. Certified copies of the priority documents have been received in Application No | | | | | | |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage | | | | | | |
| application from the International Bureau (PCT Rule 17.2(a)). | | | | | | |
| * See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
| | | | | | | |
| | | | | | | |
| Attachment(s) | A) [] [-4: | (DTO 442) | | | | |
| Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) | 4) Interview Summary Paper No(s)/Mail Do | ate | | | | |
| 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 7 Feb. 2005, 4 Aug. 2006. | 5) Notice of Informal F 6) Other: | Patent Application | | | | |

Art Unit: 3654

DETAILED ACTION

Information Disclosure Statement

The information disclosure statements (IDS) filed on 7 February 2005 and 4 August 2006 fail to comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609 because copies of foreign patent documents, excluding reference CN 1410338 A, were not provided. The translation of CN 1410338 A, as listed on the IDS, was not provided.

The examiner was able to retrieve and consider those documents as initialed. The IDS has been placed in the application file, but the non-retrievable or missing information referred to therein has not been considered and has been struck accordingly. Applicant is advised that the date of any re-submission of any item of information contained in this information disclosure statement or the submission of any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the statement, including all certification requirements for statements under 37 CFR 1.97(e). See MPEP § 609.05(a).

Specification

The abstract of the disclosure is objected to for the use of an indefinite term "thin type" as rejected below. Correction is required. See MPEP § 608.01(b).

Claim Objections

Claims 14 - 25 are objected to because of the following informalities: The term "elevator hoisting machine" should be concisely written as "elevator drive", "elevator machine" or, if preferred, "elevator-hoisting machine".

Further to **Claim 15**, "... a fixed frame provided with a hat shape cross sectional shape is provided in the vicinity..." would be better expressed as "...a fixed frame of (or having a) hat-shaped cross sectional form is provided in the vicinity..."

Appropriate corrections are required.

Application/Control Number: 10/523,762 Page 3

Art Unit: 3654

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 14 - 25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Re: Claim 14, "An elevator-hoisting machine having a thin shape..." is indefinite because it is unclear if "thin shape" refers to an element of the hoisting machine or the machine itself, wherein the latter is indefinite as well in that the particular shape of reference has not been defined.

Re: Claim 15, "thin type" as limitation for an elevator-hoisting machine is indefinite because it is unclear as to what distinguishes a "thin type".

Re: Claim 17, "radial gap type motor" is indefinite because the term "type" is indistinguishable.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 14 – 16 and 24 - 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Nagata et al (6,851,520).

Nagata et al disclose an elevator-hoisting machine of thin depth comprising:

- A sheave (51, fig. 1B),
- A fixed main shaft (45) that supports the sheave through a bearing (50),

Application/Control Number: 10/523,762 Page 4

Art Unit: 3654

 A rotation support frame (49) comprising a rotor mounting portion to which a rotor (52) is mounted, the rotation support frame being formed integrally with the sheave.

- A fixed frame (46) comprising a hollow extended portion (bend by numeral
 46) and a cylindrical portion (45),
- the extended portion having a disc-like shape and being extended in a circumferential direction of a rotation centerline of the sheave,
- the cylindrical portion being bent approximately in a vertical direction from the extended portion and being extended toward the fixed main shaft,
- a stator (47) of a motor (23) formed larger than the sheave,
- a stator mounting portion (46a) to which the stator is mounted,
- the stator mounting portion being provided to the fixed frame body,
- wherein the cylindrical portion overlaps the rotation support frame in the circumferential direction of the rotation centerline of the sheave,
- said sheave having a thickness in a rotation centerline direction that is thinner than an outside dimension in a radial direction,
- said fixed main shaft is jointed to the fixed frame member, making a fixed member,
- and said sheave and rotation member being of either integrated or separable members.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nagata et al in view of Eckersley et al (4,739,969).

Art Unit: 3654

Nagata et al disclose the related art having a radial gap motor (Fig. 3) in which the brake device includes the outer radial surface of the cylindrical rotor-mounting portion (17c).

Attention is directed to Eckersley et al who teach their radial-gap motor (M, Fig. 5) comprising a cylindrical rotor-mounting portion (20) and a stator-mounting portion disposed in a radial direction of rotation, maintaining a gap with the rotor-mounting portion, characterized by a brake device (50) in which an inner radial surface of the cylindrical rotor-mounting portion forms a braking surface, whereby controlled slippage for leveling of the elevator car and quickened, smooth release of the brakes and a compact arrangement (Col. 5, Line 51 and Col. 8, Line 28 – 35 respectively).

It would have been obvious to one of ordinary skill in the art to modify the invention of Nagata et al with the teaching of Eckersley et al to provide an elevator-hoisting machine with braking means affording compactness and smooth, heightened brake actuation.

Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nagata et al in view of Kitabayashi et al (4,306,165).

Nagata et al are silent regarding ventilation of their apparatus.

Attention is directed to Kitabayashi et al who teach their blower fan (15, 16) attached to an inner portion of their fixed frame member (10) for purpose of cooling the stator core and rotor.

It would have been obvious to one of ordinary skill in the art to modify the reference of Nagata et al with the teaching of Kitabayashi et al to promote cooling of the heat generating electrical components housed in a motor.

Claims 22 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nagata et al in view of Eckersley et al, as applied to Claim 17, and in further view of Kato et al (JP 200028995 A).

Nagata et al Eckersley et al are silent regarding their fixed frame members extending to a side opposite to the sheave of the fixed main shaft.

Art Unit: 3654

Kato et al teach their fixed frame member (2) that extend to sides opposite to the sheave of the fixed main shaft and their brake device to form a closed structure.

It would have been obvious to one of ordinary skill in the art to modify the references of Nagata et al and Eckersley et al with the teaching of Kato et al to provide an enclosed drive and sheave.

Allowable Subject Matter

Claims 18 - 20 are objected to as being dependent upon rejected base claims, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

Claim 18 contains allowable subject matter because the teachings of the prior art of record taken as a whole do not show or render obvious the combination set forth including the opening portion provided to the fixed frame member in a region adjacent to the braking surface of the rotor-mounting portion.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Hakala et al (US 5,982,060) is cited for reference of an elevator-hoisting machine having a radial gap motor with fixed main shaft supporting rotation of a sheave about a bearing, a rotation support frame comprising a rotor mounting portion, a fixed frame comprising a cylindrical portion and an extended portion and a stator mounting portion whereby the stator of the motor is formed larger than the sheave.

Nakamura et al (US 2001/0048253) is cited for reference of an elevator-hoisting machine having multiple fan blowers attached to an inner portion of their fixed frame for uniform cooling of the interior of their motor, whereby the use of multiple motors allows for smaller sized fans and an overall smaller machine.

Page 7

Application/Control Number: 10/523,762

Art Unit: 3654

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stefan Kruer whose telephone number is 571.272.5913. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kathy Matecki can be reached on 571.272.6951. The fax phone number for the organization where this application or proceeding is assigned is 571.273.8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866.217.9197 (toll-free).

SHK

13 Sept. 2006

KATHY MATECKI
SUPERVISORY PATENT EXAMINER

TECHNOLOGY CENTER 3600